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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,461	01/09/2004	Justin Goshgarian	PA1776 US (1737.2770000)	6424
28390 7590 01/05/2007 MEDTRONIC VASCULAR, INC. IP LEGAL DEPARTMENT 3576 UNOCAL PLACE SANTA ROSA, CA 95403			EXAMINER NEAL, TIMOTHY J	
			ART UNIT 3731	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/753,461	GOSHGARIAN, JUSTIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Timothy J. Neal	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/04 09/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 5-8, 11-13, 16-19, 24, 25, 28-30, 33, and 34** are rejected under 35

U.S.C. 102(e) as being anticipated by Cottone et al. (US 2004/0093058).

Cottone discloses:

1. An expandable stent for use at an ostium, comprising: a tubular body (Item 100) having a longitudinal axis, a proximal end and a distal end; at least one flaring member (Item 200) comprised of a short segment and a long segment (Item 200), wherein said at least one flaring member is attached to the proximal end of said tubular body with the short segment and the long segment both parallel to the longitudinal axis of said tubular body in an unexpanded configuration (Fig 5); and wherein the short segment of said at least one flaring member remains generally parallel to the longitudinal axis of said tubular body in an expanded configuration ((Fig 12), and the long segment of said at least one flaring member becomes generally perpendicular to the longitudinal axis of said tubular body in the expanded configuration (Fig 12).
2. The expandable stent of claim 1, further comprising a retaining structure covering only said at least one flaring member, wherein the removal of said retaining structure

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results in the expanded configuration of said at least one flaring member (Item 520 and Paragraph 8).

5. The expandable stent of claim 1, wherein said tubular body is constructed from stainless steel (Paragraph 22).

6. The expandable stent of claim 1, wherein said at least one flaring member is constructed from an elastic material (Paragraph 22).

7. The expandable stent of claim 1, wherein said at least one flaring member is constructed from nitinol (Paragraph 22).

8. The expandable stent of claim 1, wherein said tubular body is placed onto a balloon of a balloon catheter for expansion within a body lumen (Fig 5).

11. The expandable stent of claim 1, wherein the expandable stent is a multiple module prosthesis and the multiple modules are fixed together (Fig 4B).

12. The expandable stent of claim 11, wherein the multiple modules are fixed together by welds (Product by process, considered but given no patentable weight).

13. An ostium stent system, comprising: a balloon catheter (Item 530), wherein the

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balloon catheter includes a balloon mounted on a distal portion of the balloon catheter (Item 530); and a stent mounted on the balloon (Item 100), the stent including: a tubular body having a longitudinal axis, a proximal end and a distal end, wherein the tubular body is expanded by inflation of the balloon (Item 100); at least one flaring member attached to the proximal end of said tubular body, wherein said at least one flaring member is self expandable (Item 200); and a retaining structure covering only said at least one flaring member, wherein the removal of said retaining structure results in the expanded configuration of said at least one flaring member (Item 520).

16. The ostium stent system of claim 13, wherein said tubular body is constructed from stainless steel (Paragraph 22).

17. The ostium stent system of claim 13, wherein said at least one flaring member is constructed from an elastic material (Paragraph 22).

18. The ostium stent system of claim 13, wherein said at least one flaring member is constructed from nitinol (Paragraph 22).

19. The ostium stent system of claim 13, wherein said at least one flaring member is comprised of a short segment and a long segment, wherein said at least one flaring member is attached to the proximal end of said tubular body with the short segment and the long segment both generally parallel to the longitudinal axis of said tubular body in

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an unexpanded configuration (Fig 5), and wherein the short segment of said at least one flaring member remains generally parallel to the longitudinal axis of said tubular body in an expanded configuration (Fig 12), and the long segment of said at least one flaring member becomes generally perpendicular to the longitudinal axis of said tubular body in the expanded configuration (Fig 12).

24. An ostium stent system, comprising: a balloon catheter (Item 530), wherein the balloon catheter includes a balloon mounted on a distal portion of the balloon catheter (Item 530); and a stent (Item 100) mounted on the balloon, the stent including: a tubular body having a longitudinal axis, a proximal end and a distal end, wherein the tubular body is expanded by inflation of the balloon (Item 100); and at least one flaring member attached to the proximal end of said tubular body, wherein said at least one flaring member is self expandable (Item 200).

25. The ostium stent system of claim 24 further comprising a retaining structure covering only said at least one flaring member, wherein the removal of said retaining structure results in the expanded configuration of said at least one flaring member (Item 520).

28. The ostium stent system of claim 24, wherein said tubular body is constructed from stainless steel (Paragraph 22).

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29. The ostium stent system of claim 24, wherein said at least one flaring member is constructed from nitinol (Paragraph 22).

30. The ostium stent system of claim 24, wherein said at least one flaring member is comprised of a short segment and a long segment, wherein said at least one flaring member is attached to the proximal end of said tubular body with the short segment and the long segment both generally parallel to the longitudinal axis of said tubular body in an unexpanded configuration (Fig 5), and wherein the short segment of said at least one flaring member remains generally parallel to the longitudinal axis of said tubular body in an expanded configuration (Fig 12), and the long segment of said at least one flaring member becomes generally perpendicular to the longitudinal axis of said tubular body in the expanded configuration (Fig 12).

33. The ostium stent system of claim 24, wherein the stent is a multiple module prosthesis and the multiple modules are fixed together (Fig 4B).

34. The ostium stent system of claim 33, wherein the multiple modules are fixed together by welds (Product by process, considered but given no patentable weight).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3, 4, 9, 10, 14, 15, 20-23, 26, 27, 31, and 32** are rejected under 35

U.S.C. 103(a) as being unpatentable over Cottone '058.

Cottone discloses the invention substantially as claimed as stated above.

Cottone does not explicitly disclose the stent comprising the cobalt-chrome alloy MP35N. However, the Examiner considers this alloy to be well known in the art for the use of stents. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cottone's stent to include the cobalt-chrome alloy. MP35N offers good biocompatibility and expansion characteristics.

Cottone also does not explicitly disclose the lengths associated with the flaring member. However, the Examiner considers it to be within the purview of a person having ordinary skill in the art to adjust Cottone's flared portion to any desired length. Furthermore, Figure 4B shows the general relation between the short segment and the long segment of the flaring member. In this drawing, the relative lengths between the two segments are substantially equivalent to the claimed lengths. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cottone's segments to the claim's lengths. Such a modification would provide desirable length characteristics for a variety of differently sized lumens. Furthermore, there is a need for the long, perpendicular segments to be significantly longer than the short segments so that the device will be able to maintain its location. If



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the segments are too short, the segments will not maintain their proper expanded position, and the device will be susceptible to movement.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Neal whose telephone number is (571) 272-0625. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJN

  
**ANH TUAN T. NGUYEN**  
**SUPERVISORY PATENT EXAMINER**  
*12/26/06*